

POPSF
11.3.18.1 v9

NF National Foam

P.O. Box 270, Exton, PA 19341-1350, USA
Ph. 610-363-1400 Fax 610-524-9073

MATERIAL SAFETY DATA SHEET

UNIVERSAL PLUS 3% / 6%

ALCOHOL RESISTANT AQUEOUS FILM FORMING FOAM

Section 1. CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Material Identification

Product: Universal Plus 3% / 6%

Synonyms: Alcohol Resistant Aqueous Film Forming Foam (AR-AFFF)

CAS No: Mixture - No single CAS # applicable

Company Identification

Manufacturer:

National Foam, Inc.

150 Gordon Drive

P.O. Box 270

Exton, PA 19341-1350

Emergency Phone Number (610) 363-1400 (U.S.A.)

Fax (610) 524-9073

Section 2. COMPOSITION / INFORMATION ON INGREDIENTS

Components	CAS Number
Water	7732-18-5
(2-Methoxymethylethoxy) Propanol	34590-94-8
Proprietary mixture of synthetic detergents	No single CAS # applicable
Fluoroalkyl Surfactant	34455-29-3
Polysaccharide	11138-66-2

USEPA SF



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Section 3. HAZARDS IDENTIFICATION

Potential Health Effects

Inhalation

No data available.

Skin Contact

Contact with liquid may cause moderate irritation or dermatitis due to removal of oils from the skin.

Eye Contact

Product is an eye irritant.

Ingestion

No significant signs indicative of any adverse health effect are expected to occur as a result of ingestion.

Additional Health Effects

Existing eye or skin sensitivity may be aggravated by exposure.

Carcinogenicity Information

No data available.

Section 4. FIRST AID MEASURES

Inhalation

If inhaled, remove victim to fresh air. Give oxygen or artificial respiration as needed. Obtain emergency medical attention.

Skin Contact

In case of skin contact, immediately flush skin with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. If irritation occurs, obtain medical attention. Wash contaminated clothing before re-use.

Eye Contact

In case of eye contact, immediately flush eyes with copious amounts of water for 15-30 minutes. Retract eyelids often. Contact a physician.

Ingestion

If swallowed, give victim plenty of water to drink. Do not induce vomiting. Call a physician or poison control center. Never administer anything by mouth to an unconscious person.

Section 5. FIRE FIGHTING MEASURES

Flammable Properties

Flash Point N/A

Fire and Explosion Hazards

Avoid contact with water reactive materials, burning metals and electrically energized equipment.

Extinguishing Media

Product is an extinguishing media. Use media appropriate for surrounding materials.

Special Fire Fighting Instructions

This product will produce foam when mixed with water.

Section 6. ACCIDENTAL RELEASE MEASURES**Safeguards (Personnel)**

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (Personnel) sections before proceeding with clean-up. Use appropriate Personal Protective Equipment during clean-up.

Accidental Release Measures**Concentrate**

Stop flow if possible. Use appropriate protective equipment during clean up. Collect spilled concentrate with absorbent material. Flush area with water until it no longer foams. Exercise caution, surfaces may be slippery. Prevent discharge of concentrate to waterways. Do not discharge into biological sewer treatment systems without prior approval. Disposal should be made in accordance with federal, state and local regulations.

Foam/Foam Solution

See above. Flush with water. Prevent discharge of foam/foam solution to waterways. Do not discharge into biological sewer treatment systems without prior approval. Disposal should be made in accordance with federal, state and local regulations.

Section 7. HANDLING AND STORAGE**Handling (Personnel)**

Avoid contact with eyes, skin or clothing. Avoid ingestion or inhalation. Rinse skin and eyes thoroughly in case of contact. Review HAZARDS and FIRST AID sections.

Storage

Recommended storage environment is within 35°F (2°C) - 120°F (49°C). Store product in original shipping container or tanks designed for product storage.

Section 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Engineering Controls**

Special ventilation is not required.

Personal Protective Equipment

Respiratory

Recommended exposure limits (OSHA-PEL and ACGIH-TLV) have not been determined for this material. The need for respiratory protection should be evaluated by a qualified health specialist.

Protective Clothing

Rubber or PVC gloves recommended.

Eye Protection

Safety glasses, face shield or chemical splash goggles must be worn when possibility exists for eye contact. Contact lenses should not be worn. Eye wash facilities are recommended.

Other Hygienic Practices

Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Promptly remove soiled clothing and wash thoroughly before re-use.

Exposure Guidelines

Exposure Limits

(2-Methoxymethylethoxy) Propanol (34590-94-8)

PEL (OSHA)

100 ppm, 8 hr. TWA Skin

150 ppm, 15 min. STEL Skin

TLV (ACGIH)

100 ppm, 8 hr. TWA Skin

150 ppm, 15 min. STEL Skin

Section 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Data

Boiling Point: Not applicable

Vapor Pressure: Not applicable

Vapor Density: Not applicable

Melting Point: Not applicable

Evaporation Rate: <1 (Butyl Acetate = 1.0)

Solubility in Water: 100%

pH: 8.2

Specific Gravity: 1.022 @ 25°C

Odor: Mild, pleasant

Form: Viscous liquid

Color: Straw yellow

Section 10. STABILITY AND REACTIVITY

Chemical Stability

Stable.

Incompatibility, Materials to Avoid

Avoid use of product on burning metals, electrically-energized equipment and contact with water reactive materials.

Polymerization

Will not occur.

Section 11. TOXICOLOGICAL INFORMATION

Mammalian Toxicity

Ingestion

This material was not toxic when administered to Wistar Albino rats at an acute oral dose of 5g/kg body weight.

Eye

Animal testing indicates this material is a primary eye irritant when tested undiluted on New Zealand White Rabbits.

Skin

Animal testing indicates this material is not a primary skin irritant when tested undiluted on New Zealand White Rabbits.

Inhalation

No data available at this time.

Carcinogenic, Developmental, Reproductive, Mutagenic Effects

No data available on this material.

Section 12. ECOLOGICAL INFORMATION

Ecotoxicological Information Aquatic Toxicity

96 hr. Flow Through LC50 for Fathead Minnows (pimephales promelas) is reported to be greater than 1000 ppm.

Environmental Fate

BOD5 Concentrate 68,800 mg/kg

COD Concentrate 190,000 mg/kg

Section 13. DISPOSAL CONSIDERATIONS

Water Disposal

Universal Plus can be treated by wastewater treatment facilities. Give advance notice. Specific concerns are high BOD load and foaming tendency. Low dosage flow rate or antifoaming agents may be helpful. Do not flush to waterways. Disposal should be made in accordance with federal, state and local regulations.

Section 14. TRANSPORTATION INFORMATION

Shipping Information

Proper Shipping Name: Fire Extinguishers or Compounds N.O.I.B.N.

Hazard Class: None

UN Number: None

Section 15. REGULATORY INFORMATION

U.S. Federal Regulations

Toxic Substances Control Act (TSCA)

All components of this product are listed in the TSCA inventory.

Superfund Amendments and Reauthorization Act of 1988 (SARA), Title III

Section 302/304

There are no components of this material with known CAS numbers which are on the Extremely Hazardous Substances (EHS) list.

Section 311 & 312

Based on available information, this material contains the following components which are classified as the following health and/or physical hazards according to Section 311 & 312:

(2-Methoxymethylethoxy) Propanol 34590-94-8 (Flammability)

Section 313

This material does not contain any chemical components subject to Section 313 reporting requirements.

COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT (CERCLA)

This material does not contain any components subject to the reporting requirements of CERCLA.

OTHER REGULATORY INFORMATION

None.

STATE REGULATIONS

PENNSYLVANIA RIGHT-TO-KNOW HAZARDOUS SUBSTANCES LIST

PA Hazardous Substances present at levels greater than 1%:
(2-Methoxymethylethoxy) Propanol 34590-94-8

Section 16. OTHER INFORMATION

NFPA Rating

Health 0
Flammability 0
Reactivity 0

ADDITIONAL INFORMATION

Revision Summary

6/23/97 Updated Section 2 and Section 3.
8/21/95 Revised to ANSI format.

For further information, see National Foam Product Data Sheet for Universal Plus 3% / 6%.

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June 24, 1997